CLAIMS:

- 1. A rock boring device including a rotary disc cutter, wherein the disc cutter is driven in an oscillating manner and also driven or free to nutate.
- 2. A rock boring device as claimed in Claim 1, wherein the device includes a mounting section for the rotary disc cutter and a driven section, and wherein the mounting section is angularly offset from the axis of the driven section whereby the rotary disc cutter will both oscillate and nutate.
- 3. A rock boring machine, incorporating a rock boring device as claimed in either Claim 1 or 2, wherein the rock boring device is mounted on a boom.
- 4. A rock boring machine as claimed in Claim 3, wherein the boom is adapted to pivot about a vertical axis.
- 5. A rock boring machine as claimed in Claim 3 or 4, wherein the boom is adapted to pivot about a horizontal axis.
- 6. A rock boring machine as claimed in Claim 3 or 4, wherein the rock boring device is supported by said boom whereby as to be pivotable about an axis extending longitudinally of said boom.
- 7. A rock boring machine as claimed in any one of Claims 3 to 6, wherein the rock boring device is supported to pivot relative to said boom.
- 8. A rock boring device substantially as hereinbefore described with reference to Figures 1 to 3 of the accompanying drawings.

- 9. A rock boring machine incorporating a rock boring device as claimed in Claim 8.
- 10. A rock boring machine substantially as hereinbefore described with reference to Figures 4 and 5, or Figure 6, of the accompanying drawings.
- 11. A rock boring machine as claimed in any one of Claims 3 to 7, or Claims 9 and 10, wherein a plurality of said rock devices are carried by the machine.
- 12. A rock boring machine as claimed in any one of Claims 3 to 7, or Claims 9 to 11, wherein the cutter velocity is controlled by interaction with a computer that processes algorithms with variable information input being provided by strain gauges and accelerometers mounted adjacent to the cutter.
- 13. A rock boring machine as claimed in any one of Claims 3 to 7, or Claims 9 to 11, wherein the vehicle must be anchored or referenced to a position to insure too greater cut is not applied should the vehicle inadvertently move from the position it was in at the commencement of the cutting cycle.

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